

REMARKS

Applicants thank the Examiner for his time during the telephonic interview of April 20, 2005. During the interview, Applicants' representative presented to the Examiner a series of proposed amendments to claims 1 and 39. The Examiner indicated that the amendments discussed, as modified in view of the Examiner's suggestions, would likely overcome the outstanding rejections in view of the Vaisanen patent. Applicants have accordingly amended claims 1 and 39 pursuant to those suggestions to more clearly define the scope of the claimed invention, and have cancelled claims 20 and 56 without prejudice.

Additionally, Applicants thank the Examiner for allowing claims 14-19, 23 and 25-28, and identifying allowable subject matter in claims 3-13 and 55.

In the Office action of December 15, 2004, claims 1 and 2 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent No. 6,560,443 to Vaisanen et al. (hereinafter "Vaisanen"). Claims 20 and 56 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Vaisanen in view of U.S. Patent No 6,047,165 to Wright et al. (hereinafter "Wright"). Claim 23 was rejected under 35 U.S.C. § 103(a) as allegedly obvious over Vaisanen in view of U.S. Patent No 6,377,608 to Zyren (hereinafter "Zyren"). Claims 39-44 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Vaisanen.

Applicants respectfully traverse the rejections of record and requests reconsideration in view of the foregoing amendments and following remarks.

Additionally, the Examiner indicated on the Office Action Summary sheet that claim 23 is allowable. However, on pp. 5-6 of the Office Action, the Examiner has indicated that claim 23 is rejected under 35 U.S.C. § 103(a). Further still, on p. 8 of the Office Action, the Examiner cites the reasons for the identification of allowable subject matter in claim 23. In view of these

cited portions of the Office Action, Applicants requests clarification of the status of this claim.

At this time, Applicants will assume based on the Examiner's statements the claim 23 is allowable at this time, and accordingly, Applicants will not substantively address the Examiner's comments respecting claim 23 on p. 8 of the Office Action. Applicants, however, reserve the right to address these comments at a later date should the Examiner then conclude that the claim is not allowable.

Rejections under 35 U.S.C. § 102(e)

Applicants' invention is an apparatus and method for operating co-located transceivers operating in the same frequency band without interference. Applicants' invention provides an innovative approach to providing substantially continuous communications using two protocols, interrupting one protocol for only a brief period to service communications using the other protocol. Specifically, Applicants' invention is a solution which allows a device to operate robustly in the same frequency at the same time using different protocols, e.g., Bluetooth and 802.11. (See Specification, p. 5).

The Vaisanen Patent relates only to antenna sharing switching circuitry for a mobile terminal having both a WLAN Transceiver and a Bluetooth transceiver. The theme is repeated throughout the Vaisanen patent. ("[U]sing one of the two separate diversity antennae for occasional BT use saves the cost and space of adding yet another antennae to a standard size hand-held mobile terminal unit" (col. 7, lns. 31-35); "This new intended switching scheme for a multi-transceiver mobile terminal and method therefor solves the problems associated with the sharing of antennae, antennae switching and sharing of the filter chains of, for example, a WLAN/BT dual mode hand-held terminal" (col. 9, lns. 21-25)). Indeed, even the title of the

Vaisanen patent provides insight into the intended purpose of the invention (“Antenna Sharing Switching Circuitry for Multi-Transceiver Modile Terminal and Method Therefor”).

The Vaisanen arrangement does not attempt to coordinate operation according to the two protocols, but rather selects the preferred protocol (WLAN) when an access point is available, and the Bluetooth protocol when an access point is not available. (“In general, *BT connection is effected when the hand-held terminal is located outside the available coverage of WLAN.*” (col. 6, lns. 44-46). The system described by Vaisanen is entirely different and distinct from that of the present invention, which is intended to effectuate communications with both protocols at the same time, by performing communications with one protocol during dormant periods in the other. Vaisanen does not intend to effectuate communications channels using both protocols simultaneously, but rather communicates using one protocol or the other depending on availability.

In this case a portable terminal communicates via a mobile phone, using Bluetooth. As described at column 1, lines 34 to 40, the arrangement of Vaisanen is intended to enable a personal portable computer to send and receive e-mail via a mobile telephone without wired connection between the mobile telephone and the portable computer when the computer is outside WLAN range, but to use the WLAN when an access point is available. There is no attempt, as in the present invention, to coordinate operation of transceivers using the two different protocols, except to receive signals to monitor the presence of a WLAN access point when communicating using Bluetooth protocol. (See col. 4, lines 54 to 60).

As amended, claim 1 and dependent claim 2 are distinguished over the Vaisanen Patent since the radios communicate to maintain substantially continuous communications using both protocols (by continuously switching between transmitting signals according to the two protocols

and not transmitting in both simultaneously), as opposed to the mode-switching scheme of the Vaisanen Patent, and are further distinguished in that claims specify that the coordinator causes the base station to transmit command signals to activate the first and second transceivers. In the Vaisanen patent the control circuit is not a coordinator and is not associated with a base station and arranged to cause the base station to transmit command signals. Accordingly, it is respectfully submitted that claims 1 and 2 are patentable over Vaisanen.

Rejections under 35 U.S.C. § 103(a)

As noted in response to the previous office action in this application, Applicants respectfully maintain that the combination of Wright and Vaisanen is improper. However, assuming *arguendo* that the combination is proper, Applicants still respectfully traverse these rejections.

Claims 39-44 are rejected as allegedly obvious in view of the Vaisanen Patent.

Applicants respectfully request reconsideration based on the following remarks.

The invention specified by claim 39 is a method of providing voice communications over a WLAN system and using a wireless headset. In particular, as set forth in the claims, voice data is communicated between the mobile unit and an access point using a first protocol, such as IEEE Standard 802.11. The mobile unit may be, for example a belt mounted portable data communications device. The mobile unit communicates the voice data with a portable device, which may be a wireless headset using a second data communications protocol, such as Bluetooth. Communication with the portable device is arranged to be non-interfering with the communications with the access point. Conversion between voice and data takes place in the portable device.

The Vaisanen Patent, while disclosing WLAN communications between a mobile unit and an access point and disclosing Bluetooth communications between the mobile unit and a mobile phone (Column 2, lines 17 to 20), neither discloses nor suggests the method of claim 39.

First, as noted above, Vaisanen describes a data communications system for antenna sharing wherein data is communicated over a WLAN when an access point is available and over a cellular telephone only when an access point is not available. There is no suggestion that the same data corresponding to voice be communicated to the mobile unit from the access point using one protocol and from the mobile unit to the portable device using another protocol. Indeed, Vaisanen teaches precisely the *opposite*, since the system of Vaisanen does not disclose or suggest using both radio transceivers simultaneously, but rather *only using one or the other* depending upon the availability of wireless networks. (*See, e.g., Vaisanen* , col. 6, lines 36-53, discussing that WLAN is the preferred operation, and that Bluetooth is only utilized when no WLAN is detected). Indeed, the system of Vaisanen would not even be capable of performing the functions of the claimed invention, since there is no continuous/simultaneous operation of both radios.

Using the system of Vaisanen, a user could only use the mobile telephone directly for voice communications. Using the Vaisanen system which applies only one protocol at a time, there could be no communication between the mobile unit and the mobile telephone when an access point is available to the mobile unit (since, as noted above, WLAN is the “preferred method” of communication (Vaisanen, col. 6, lines 46-47)).

Vaisanen clearly does not contemplate or suggest the method of claim 39 and dependent claims 40-44, for at least the reason that there is no disclosure or suggestion to transmit the same data using two different protocols, and for the additional reason that, as discussed above,

Vaisanen is not directed to communication using two different protocols at the same time.

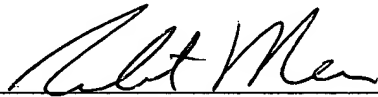
Accordingly, Applicants respectfully submit that claims 39 and 44 are patentable.

Reconsideration of the rejections of claims 39-44 is respectfully solicited.

CONCLUSION

In view of the foregoing amendment and remarks, favorable reconsideration and allowance of claims 1, 2 and 29-34, in addition to the present allowance of claims 3-19, 23, 25-28 and 55 are respectfully solicited. In the event that the application is not deemed in condition for allowance, the examiner is invited to contact the undersigned in an effort to advance the prosecution of this application.

Respectfully submitted,



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